

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|------------|----------|---------|-------|---------|----|------------|------|-------|-------|------|------|-----|-------|------|------|--------|---------|-----|-----|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SHSFGEEDDDNYL | TASSKDEPFL | NGVYVYTA | KREIRGN | AVAGS | STAYEIR | IN | OSTDEBOELL | DNYL | SVYGL | YVAVY | SNIP | IEDK | POO | FVYNS | GVMS | AECS | APCGGR | KRAKLYT | RES | DLY | VS | D | R | C | R | L | P | O | P | E | T | T | P | C | G | D | L | R | N | H | V | A | S | R | E | C | S | D | T | L | D | I | C | A | K | Y | S | R | L | D | G | K | T | E | K | V | D | K | F | C | S | S | H | R | P | K | S | E | C | E | T | G | M | R | S | A | M | E | C | S | D | G | T | O | R | R | A | I | C | V | N | T | R | N | D | V | L | D | S | K | T | H | O | E | K | V | T | I | O | R | S | E | P | C | P | O | M | K | S | G | D | S | E | C | L | V | T | G | K | H | R | O | V | A | C | O | F | E | M | E | D | L | D | R | M | C | D | E | P | E | T | S | M | O | T | C | O | O | E | P | C | A | S | O | G | V | T | O | L | R | A | V | K | I | G | I | G | T | V | D | N | D | N | A | T | R | P | T | D | O | L | P | C | H | N | P | A | P | E | T | R | S | T | A | P | R | O | M | F | E | G | S | M | P | S | A | T | C | G | K | T | E | K | V | D | K | F | C | S | S | H | R | P | K | S | E | C | E | T | G | M | R | S | A | M | E | C | S | D | G | T | O | R | R | A | I | C | V | N | T | R | N | D | V | L | D | S | K | T | H | O | E | K | V | T | I | O | R | S | E | P | C | P | O | M | K | S | G | D | S | E | C | L | V | T | G | K | H | R | O | V | A | C | O | F | E | M | E | D | L | D | R | M | C | D | E | P | E | T | S | M | O | T | C | O | O | E | P | C | A | S | O | G | V | T | O | L | R | A | V | K | I | G | I | G | T | V | D | N | D | N | A | T | R | P | T | D | O | L | P | C | H | N | P | A | P | E | T | R | S | T | A | P | R | O | M | F | E | G | S | M | P | S | A | T | C | G | K | T | E | K | V | D | K | F | C | S | S | H | R | P | K | S | E | C | E | T | G | M | R | S | A | M | E | C | S | D | G | T | O | R | R | A | I | C | V | N | T | R | N | D | V | L | D | S | K | T | H | O | E | K | V | T | I | O | R | S | E | P | C | P | O | M | K | S | G | D | S | E | C | L | V | T | G | K | H | R | O | V | A | C | O | F | E | M | E | D | L | D | R | M | C | D | E | P | E | T | S | M | O | T | C | O | O | E | P | C | A | S | O | G | V | T | O | L | R | A | V | K | I | G | I | G | T | V | D | N | D | N | A | T | R | P | T | D | O | L | P | C | H | N | P | A | P | E | T | R | S | T | A | P | R | O | M | F | E | G | S | M | P | S | A | T | C | G | K | T | E | K | V | D | K | F | C | S | S | H | R | P | K | S | E | C | E | T | G | M | R | S | A | M | E | C | S | D | G | T | O | R | R | A | I | C | V | N | T | R | N | D | V | L | D | S | K | T | H | O | E | K | V | T | I | O | R | S | E | P | C | P | O | M | K | S | G | D | S | E | C | L | V | T | G | K | H | R | O | V | A | C | O | F | E | M | E | D | L | D | R | M | C | D | E | P | E | T | S | M | O | T | C | O | O | E | P | C | A | S | O | G | V | T | O | L | R | A | V | K | I | G | I | G | T | V | D | N | D | N | A | T | R | P | T | D | O | L | P | C | H | N | P | A | P | E | T | R | S | T | A | P | R | O | M | F | E | G | S | M | P | S | A | T | C | G | K | T | E | K | V | D | K | F | C | S | S | H | R | P | K | S | E | C | E | T | G | M | R | S | A | M | E | C | S | D | G | T | O | R | R | A | I | C | V | N | T | R | N | D | V | L | D | S | K | T | H | O | E | K | V | T | I | O | R | S | E | P | C | P | O | M | K | S | G | D | S |
|---------------|------------|----------|---------|-------|---------|----|------------|------|-------|-------|------|------|-----|-------|------|------|--------|---------|-----|-----|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|------------------------------|---|-------------------|-------------|----------|-----------------|--------|----------|---------|
| PPPAAPRTSTSTSA | RTQWRRECSW | PCSATGCKG | TRMRYV | SGCRBNGS | VADAESAC | ATLPR | VPVAEECS | VTMP |
| 1010 | 1020 | 1030 | 1040 | 1050 | 1060 | 1070 | 1080 | 1090 |
| CGCKALDWS | SCSVATCGG | QATRQV | CMVNSD | HVADR | SECDDY | IPETDD | QCS | MSPCQRT |
| 1090 | 1100 | 1110 | 1120 | 1130 | 1140 | 1150 | | |
| NEDYRPSAS | PSRSTHYL | GGQWMT | GTGPMG | ACSSY | CAGCSG | SRVAV | CODENG | YATNC |
| 1160 | 1170 | 1180 | 1190 | 1200 | 1210 | 1220 | | |
| CPQWAVGN | MEECTK | LCGGG | ITRLV | VVCS | NEHR | FPDL | CEILL | DRPPR |
| 1230 | 1240 | 1250 | 1260 | 1270 | 1280 | 1290 | | |
| VSCGRGK | KORNVY | CMAKD | SGSH | LES | DDCK | HLAK | RPHGR | KCRG |
| 1300 | 1310 | 1320 | 1330 | 1340 | 1350 | 1360 | | |
| GTHKIA | ETECN | ETPTRE | SRDC | CGFR | CP | LYT | WRAE | MOE |
| 1370 | 1380 | 1390 | 1400 | 1410 | 1420 | 1430 | 1440 | |
| KRPVDR | ESC | SLQ | CEV | MTG | EMSE | VPS | WEIK | LPSS |
| 1450 | 1460 | 1470 | 1480 | 1490 | 1500 | 1510 | | |
| TSP | LSQ | AR | IPC | MO | SG | RDV | ND | LX |
| 1520 | 1530 | 1540 | 1550 | 1560 | 1570 | 1580 | | |
| QCGMA | VTN | XN | HL | CG | SR | ST | SP | PA |
| 1590 | 1600 | 1610 | 1620 | 1630 | 1640 | 1650 | | |
| NPE | HE | DV | LC | F | NK | OL | Q | R |
| 1660 | 1670 | 1680 | 1690 | 1700 | 1710 | | | |
| 2. US-09-972-467-2 (589-642) | ab037733 | TOIG of: ab037733 | check: 4803 | from: 1 | to: 5139 | | | |
| TOIG of: ab037733 | check: 4803 | from: 1 | to: 5139 | | | | | |
| LOCUS | AB037733 | 5139 bp | mRNA | linear | PRI 14-MAR-2000 | | | |
| DEFINITION | Homo sapiens mRNA for KIAA1312 protein, partial cds. | | | | | | | |
| ACCESSION | AB037733 | | | | | | | |
| VERSION | AB037733.1 | GI:7242978 | | | | | | |
| KEYWORDS | | | | | | | | |
| SOURCE | | | | | | | | |
| ORGANISM | Homo sapiens brain cDNA to mRNA, clone_11b:pb1uescriptII SK plus clone:fh11767. | | | | | | | |
| AUTHORS | Ohara, O., Nagase, T. and Kikuno, R. | | | | | | | |
| TITLE | 1 (sites). | | | | | | | |
| REFERENCE | Nagase, T., Kikuno, R., Ishikawa, K. I., Hirose, M. and Ohara, O. XVI. Prediction of the coding sequences of unidentified human genes. code for large proteins in vitro | | | | | | | |
| JOURNAL | DNA Res. 7 (1), 65-73 (2000) | | | | | | | |
| MEDLINE | 20181126 | | | | | | | |
| REFERENCE | 2 (bases 1 to 5139) | | | | | | | |
| AUTHORS | Ohara, O., Nagase, T. and Kikuno, R. | | | | | | | |
| TITLE | Direct Submission | | | | | | | |
| JOURNAL | Submitted (31-JAN-2000) Osamu Ohara, Kazusa DNA Research Institute, Laboratory of DNA Technology; 1533-3 Yana, Kisarazu, Chiba 292-0812, Japan (E-mail:cdna1fo@kazusa.or.jp, URL:http://www.kazusa.or.jp/huge/, Tel:+81-438-52-3913, Fax:+81-438-52-3914) | | | | | | | |
| FEATURES | Location/Qualifiers | | | | | | | |
| source | 1..5139 | | | | | | | |
| gene | /organism="Homo sapiens" | | | | | | | |
| CDS | /db_xref="taxon:9606" | | | | | | | |
| | /clone="fh11767" | | | | | | | |
| | /tissue_type="brain" | | | | | | | |
| | /clone_11b="pb1uescriptII SK plus" | | | | | | | |
| | 1..4417 | | | | | | | |
| | /gene="KIAA1312" | | | | | | | |
| | <1..4417 | | | | | | | |
| | /gene="KIAA1312" | | | | | | | |
| | /note="Start codon is not identified." | | | | | | | |

```
/codon_start=2
/product="KIAA1312 protein"
/protein_id="BAA92550.1"
/db_xref="GI:7242979"
/translation="NSEHNAVVISGSMIGTPRRSHDGVETPELOSMBDEDEEONK
PHIYIRASAPOREPSTGRACDTSEKRNHSDKKTTRAKKEGELINLAGVAAINSG
LATEASAIKNTDNTREKRIHRTKRELSTYREVEVLVANRVNYSHGEMLQHYIL
TLMSTIASIKDPSIGNLINIYVNLIVHMDPSISFNQOTLKRNPCQOHKNS
PGIHHDTAVLLTODICAHKCDTGLAEATGICDEPRSCSIEDSGLSTAFIAH
ELGHVNHMDNNKCKEKGSPQHVAAPLTINFTNPMMSCKSKRYITTEFLDTGCG
ECLINPEESPAPLIPVOLLGILLYNKOCELIFGFSOVCPYMAOCRRILMCNNVGVH
KCGRQHTPMAGTCEBCEPKHCKYGFVCKEADVYVDSMGSMSPFTGCTCGGGI
KTAIRECNPEKNGKCYGVGRMKFKSCNTEPCLOKREDEECAPHFDEKHEFNG
LLPNWAVPKYSKARIDKCLFCRVAGNTAYOQIDRYTIDTPOGOTNDICVGLC
ROAGDHVNLKARIDKCGVCGDNSTGVTAGTGVNIVRIIPAGTINIDVR
OHSEGETDDNYLALSSKGEFLNGVYMARRELRIGAAVVEYSGEFAVERIN
SNDRIEOLLQVLSVGLKNPDVSPNPIREDRPOCFYRNHSHPMOACSCPCGGER
KKKLVCTRESDDLVSODCRLLPQGHITTEPCGDIIRHVAIRSCSACQGLGR
TLDITCAKYSRLDGTETKVDGFCSSHPSPRREKSGECNNGWRYSAWTECSKSD
GGTORRRAICVNTNDVLDSDKCTHOEKVYTORCESEFPQPMKSGDMECLVTCGKH
KHROWCOFGEEDRLNDRCMDPEPTKPTSMOTCOQPCASQWAGPMGCGVTCGOGLR
AVKCIIGTAVSVDDNCDMAATRPMDTODCELPSGHPPAAPETRRSYASAPRDMRE
GSMTPCSATCGKTRRYVSCDENGSAVDEACATLIRPAKKECSYTPCGOMKALD
WSSCYTCGGRATROVMCVNIDSHVIDSECDQYIPEITDQCSMSPCPOPTPSGL
AOHPQUNEDYRPRASPSKTHVLGNGNOMRTGQWGSSTCAGSGRNVVCOQDENGYL
ANDCVERIIPDEORACESGPCOMAYGNWECTKCGGGIRTLVVCORNSGERPDL
SCIEILKPRDEOCNTHACPHDAAMSTGPMSCSYSCGKHORNVYOMAKNGSHLES
DYCKHLAKPHGRKCGRCGRPKKAWGAMSGVSGRGOQOHVGCIOGTHIAETE
CMPTKPRSEPRCCGPRCLYTKWRADEMDECTKTCGEGSRIRKVVYCVDDNKNEVGAR
CVSKRPDRSCSLQPCETVITGEMSEVSEWEL"
```

```
BASE COUNT      1471 a      1112 c      1362 g      1194 t
ORIGIN
AB037733 Length: 5139 June 20, 2002 06:02 Type: N Check: 4803
```

```
Initial Score = 7 Optimized Score = 12 Significance = -0.30
Residue Identity = 24% Matches = 17 Mismatches = 37
Gaps = 16 Conservative Substitutions = 0
Translation Frame= 4
```

```
MITGGLPIKRVXISIVHRIYEKMWLEILRIILKIIFLXSCLLNHNHNTSGSKGFVCPLOCFKTKNPSPH
10 20 30 40 50 60 70
FOYKRSHILVQIFSLXKIRSGNARPHFCMATAGVKEILLPSHSMCFYTVVAISPCCIPEPTTIFYSTXLSGS
80 90 100 110 120 130 140
TSGHPSLQPLXXFLLYANRTSRXITCPRREGTXRPSLTSLPCLIOGILAWESXGLVRKHTVYSGSGXHPQ
150 160 170 180 190 200 210
VSHIPLALIPLLPLRLPSLGHGXADGVSSODGTSNHSFVIOYTSOGCKIQLSRSTGRLLTSQARACTSFLLSS
220 230 240 250 260 270 280
THTTLRLTEPSPOVLVHSHSALQVYKRGHGRWQMSDGLVYGSLHVSALILCVPIXQPTCLCCTPRPD
290 300 310 320 330 340 350 360
TEHXLAPAFNHLGHLPRRHFLCPCGLARCLQXSLSKWLPSFAMQXTFFCLCPRPOETENEHLQGPVLHMA SCG
370 380 390 400 410 420 430
QACVLHCSRSRSGGLSRISOLKSGNRSPLDKQXTSIVLMPRPHSHVSPQRLPAHXGQGPDSQALCSSGFLLS
440 450 460 470 480 490 500
TQSFAYVFFSSXHTTTRRMWRPAQVLEHNAFOGVLIHMFPPSTWVRLGLALRGHXSFWKGCXAKPSGLVLG
510 520 530 540 550 560 570
HGDMDEQMSVSGIKSMHSLRSITWMSXLHNTICRYALLPCQUTPEOLQSKARHCPOGVTEHSSPATGLGRV
580 590 600 610 620 630 640
AQAALSSATEPSSRQQLTYLIRVPPROYAEHGVODPRNHNWLGALYVLLLVSGAAGGSHDGNQSQSWVSGVY
650 660 670 680 690 700 710 720
AALQSLSTTDIXVPMNHPTALSWYRPOVTLHNCPOGRACODAHSGCXQVCTIDVGLVSGHILISFNRSRPNX
730 740 750 760 770 780 790
```

```
HQTWRCLEPFPVTKHSDOSPDEHCGQGNLSHLXMYTFSXCVHLNLSSTSPFVLTOAILLWVPSQLFERS
800 810 820 830 840 850 860
VQAEKXQPPVHLSPHEFSSLLGLGLQKLPSTSPFVPPSSLLYLQAKXSNVRXKPRPHALLSLLATCHLARS
870 880 890 900 910 920 930
QSVPOGSVNCPGWSKSNHLSSETVASDSLSVQTSFRRFSPWQGLHACHGHPXLFQXNKGSLSIGILKEKRT
940 950 960 970 980 990 1000
SGLYNEPDKTXSKSSCSNRSVELLITVAUSDPLYSTTAFPMRLSLAIYVTKPEFSSNPLLDKAKXLS
1010 1020 1030 1040 1050 1060 1070 1080
SMSPFETGCKRT---CGGSIKT--AIRCC--NR-----EPKNGKYCYGRR-MRKSCNTEPC
1090 1100 1110 1120 1130 1140 1150
SVSPKLCCTRTILVAPAGIRFTVLVLPKXCTLVNVPATVLIHELSPPQTPHLSLRAFEFKTSHPACRQRPWT
1160 1170 1180 1190 1200 1210 1220
QISFVSPGQGVSTILSRKXXXAVPRTIQQNNLHNSFTIRIPLYLTQTTLSRPLMKCFPSKXAHCSRRS
1230 1240 1250 1260 1270 1280 1290
RCLRHGSVLQDLNFIILRPTQYFPEFFSGSLHSPMAVLMPRHVLEQVPKQLDPPDSVTGSIISLGTQN
1300 1310 1320 1330 1340 1350 1360
PYLOCPGSHSVPSAQGVXVQPLCTPLTILHQSRLCIIYGHYXEPGPKNINSCLFTLXMRPQSWTGKX
1370 1380 1390 1400 1410 1420 1430 1440
GLDGSLSKHSXSPVSKNSVIYFRLLHFPHIQGLVYKFSVGMATCGWLTTPSSLHLLSSXGMLTWTPSSMAI
1450 1460 1470 1480 1490 1500 1510
VAVAVLNPSSLLEQLLQSGQWMPSSARPKVSHLSXALDISCLVKRTAVSNTPRGLFECCWCKFNVVYA
1520 1530 1540 1550 1560 1570 1580
LKDMEGPPCSLXITIKFTITLIKPEPIIGSLXIEATIDIKVIXKXRSFPWYETILSATTTKSTNRGXDK
1590 1600 1610 1620 1630 1640 1650
REFVLWLVLESLVSLVLPRAEMASVAKPLFNMAATSPARLLISPHLALVFLSLCLFECSEYSHACLPVSG
1660 1670 1680 1690 1700 1710
SLWGLRLMMWGLFCSSSSSCSIDCSGSLIKXSPSXDNNVPSIPEQRLMTAVCSE
1720 1730 1740 1750 1760 1770 1780 1790
3. US-09-972-467-2 (589-642)
ab037733 TOIG of: ab037733 check: 4803 from: 1 to: 5139
TOIG of: ab037733 check: 4803 from: 1 to: 5139
LOCUS AB037733 5139 bp mRNA linear PRI 14-MAR-2000
DEFINITION Homo sapiens mRNA for KIAA1312 protein, partial cds.
ACCESSION AB037733
VERSION AB037733.1 GI:7242978
KEYWORDS
SOURCE Homo sapiens brain cDNA to mRNA, clone.lib:pbliuescriptII SK plus
clone.fh11767.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
REFERENCE 1 (sites)
AUTHORS Nagase,T., Kikuno,R., Ishikawa,K.I., Hiroseawa,M. and Ohara,O.
TITLE Prediction of the coding sequences of unidentified human genes.
XVI. The complete sequences of 150 new cDNA clones from brain which
code for large proteins in vitro
JOURNAL DNA Res. 7 (1), 65-73 (2000)
MEDLINE 20181126
REFERENCE 2 (bases 1 to 5139)
AUTHORS Ohara,O., Nagase,T. and Kikuno,R.
TITLE Direct Submission
JOURNAL Submitted (31-JAN-2000) Osamu Ohara, Kazusa DNA Research Institute,
Laboratory of DNA Technology; 1532-3 Yana, Kisarazu, Chiba
```

292-0812, Japan (E-mail: cdnainfo@kazusa.or.jp,
URL: http://www.kazusa.or.jp/huge/, Tel: +81-438-52-3913,
Fax: +81-438-52-3914)

FEATURES

Source

Location/Qualifiers

1. 5139

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ELGIVFMPPHDNNCKEEGVKSPQHVAEPLNFTNPMWMSCKRKYITIEFLDTYG
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BASE COUNT

1471 a

1112 c

1362 g

1194 t

ORIGIN

AB037733 Length: 5139 June 20, 2002 06:02 Type: N Check: 4803 ..

Initial Score = 6 Optimized Score = 10 Significance = -0.35

Residue Identity = 22% Matches = 12 Mismatches = 36

Gaps = 6 Conservative Substitutions = 0

Translation Frame=

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150 160 170 180 190 200 210

SPFGTCSPTCGGIGITATIRECNRPEPKNGKCYGVRRMKFKSCNTEPC

10 20 30 40 50 X

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,220 230 240 250 260 270 280

290 300 310 320 330 340 350

360 370 380 390 400 410 420

430 440 450 460 470 480 490

500 510 520 530 540 550 560

570 580 590 600 610 620 630

640 650 660 670 680 690 700

710 720 730 740 750 760 770

780 790 800 810 820 830 840

850 860 870 880 890 900 910

920 930 940 950 960 970 980

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1060 1070 1080 1090 1100 1110 1120

1130 1140 1150 1160 1170 1180 1190

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360 370 380 390 400 410 420

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500 510 520 530 540 550 560

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860 870 880 890 900 910 920

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940 950 960 970 980 990 1000

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1010 1020 1030 1040 1050 1060 1070

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1080 1090 1100 1110 1120 1130 1140

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1150 1160 1170 1180 1190 1200 1210

FISVSLLEFTWLRVAGLKRHSYSYVFTSTIFMFWSVALSNGCFDAPSCSGASKGTPTSPGICGDIHF

1220 1230 1240 1250 1260 1270 1280

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1300 1310 1320 1330 1340 1350 1360

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1370 1380 1390 1400 1410 1420 1430

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4. US-09-972-467-2 (589-642)

ab037733 TOIG of: ab037733 check: 4803 from: 1 to: 5139

TOIG of: ab037733 check: 4803 from: 1 to: 5139

LOCUS AB037733 5139 bp mRNA linear PRI 14-MAR-2000

DEFINITION Homo sapiens mRNA for KIAA1312 protein, partial cds.

ACCESSION AB037733

VERSION AB037733.1 GI:7242978

KEYWORDS

SOURCE Homo sapiens brain cDNA to mRNA, clone_lib:pbluescriptII SK plus

clone:fh1767.

ORGANISM Homo sapiens
REFERENCE Mammalia; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS 1 (sites)
TITLE Negase,T., Kikuno,R., Ishikawa,K.I., Hirotsawa,M. and Ohara,O.
JOURNAL Prediction of the coding sequences of unidentified human genes.
MEDLINE XVI. The complete sequences of 150 new cDNA clones from brain which
REFERENCE code for large proteins in vitro
AUTHORS DNA Res. 7 (1), 65-73 (2000)
TITLE 20181126
AUTHORS 2 (bases 1 to 5139)
REFERENCE Ohara,O., Negase,T. and Kikuno,R.
AUTHORS Direct Submission
JOURNAL Submitted (31-JAN-2000) Osamu Ohara, Kazusa DNA Research Institute,
Laboratory of DNA Technology, 1532-3 Yana, Kisarazu, Chiba
URL:http://www.kazusa.or.jp/huge/, Tel:+81-438-52-3913,
Fax:+81-438-52-3914)

FEATURES
Source Location/Qualifiers
1. 5139

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BASE COUNT 1471 a 1112 c 1362 g 1194 t
ORIGIN

AB037733 Length: 5139 June 20, 2002 06:02 Type: N Check: 4803 ..

Initial Score = 6 Optimized Score = 9 Significance = -0.35
Residue Identity = 16 Matches = 11 Mismatches = 43
Gaps = 12 Conservative Substitutions = 0
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5. US-09-972-467-2 (589-642)
ab037733 TOIG of: ab037733 check: 4803 from: 1 to: 5139

TOIG of: ab037733 check: 4803 from: 1 to: 5139

LOCUS AB037733 5139 bp mRNA linear PRI 14-MAR-2000
DEFINITION Homo sapiens mRNA for KIAA1312 protein, partial cds.
ACCESSION AB037733
VERSION AB037733.1 GI:7242978
KEYWORDS
SOURCE Homo sapiens brain cDNA to mRNA, clone_1lb:pluescriptII SK plus
clone:fh11767.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.

REFERENCE
AUTHORS Nagase,T., Kikuno,R., Ishikawa,K.I., Hirose,M. and Ohara,O.
TITLE 1 (sites)
Nagase,T., Kikuno,R., Ishikawa,K.I., Hirose,M. and Ohara,O.
Prediction of the coding sequences of unidentified human genes.
XVI. The complete sequences of 150 new cDNA clones from brain which
code for large proteins in vitro

JOURNAL DNA Res. 7 (1), 65-73 (2000)
MEDLINE 20181126
REFERENCE 2 (bases 1 to 5139)
AUTHORS Ohara,O., Nagase,T. and Kikuno,R.
TITLE Direct Submission
Submitters Laboratory (31-JAN-2000) Osamu Ohara, Kazusa DNA Research Institute,
Laboratory of DNA Technology; 1532-3 Yana, Kisarazu, Chiba
292-0812, Japan (E-mail:cdnainfo@kazusa.or.jp,
URL:http://www.kazusa.or.jp/huge/, Tel:+81-438-52-3913,
Fax:+81-438-52-3914)

FEATURES
Source location:Qualifiers

1..5139

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/db_xref="taxon:9606"

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TMSIVASTIKDPSIGNLNIIVNLIVIHNEGDPSISENQTITKFCOMHSKNS
PGGTHDHTAULTRDICTRAHDKCDTGLAELGTIDPYRSKISPDGSLSTAFITAH
ELCHVEMPHDDNNKCEBVSFQVHMAFPTLFTTNPMWSKSKRTYTERLDITG
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OHSFSGTDDNTLALSSSKGEFLNGNEVYMAKEIRIGNAVETSGSETRAVETIN
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BASE COUNT 1471 a 1112 c 1362 g 1194 t
ORIGIN

AB037733 Length: 5139 June 20, 2002 06:02 Type: N Check: 4803 ..

Initial Score = 5 Optimized Score = 9 Significance = -0.40
Residue Identity = 19% Matches = 12 Mismatches = 39
Gaps = 10 Conservative Substitutions = 0
Translation Frame= 1

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150 160 170 180 190 200 210

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290 300 310 320 330 340 350

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360 370 380 390 400 410 420

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 KEYWORDS
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 Eukaryota; Euteleostomi; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE
 AUTHORS Nagase,T., Kikuno,R., Ishikawa,K.I., Hirosewa,M. and Ohara,O.
 TITLE 1 (sites)
 NAGASE,T., KIKUNO,R., ISHIKAWA,K.I., HIROSEWA,M. and OHARA,O.
 PREDICTION of the coding sequences of unidentified human genes.
 XVI. The complete sequences of 150 new cDNA clones from brain which
 code for large proteins in vitro
 DNA RES. 7 (1), 65-73 (2000)
 JOURNAL 20181126
 MEDLINE 2 (bases 1 to 5139)
 REFERENCE Ohara,O., Nagase,T. and Kikuno,R.
 AUTHORS Direct Submission
 TITLE Submitted (31-JAN-2000) Osamu Ohara, Kazusa DNA Research Institute,
 JOURNAL Laboratory of DNA Technology; 1532-3 Iana, Kisarazu, Chiba
 292-0612, Japan (E-mail:cdna@info.kazusa.or.jp,
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